NATIONAL TRANSPORTATION SAFETY BOARD DEPARTMENT OF TRANSPORTATION WASHINGTON, D.C. 20591

SEP 12 1968

A-68-23

Mr. David D. Thomas Acting Administrator Federal Aviation Administration Department of Transportation Washington, D. C. 20590

Dear Mr. Thomas:

Following takeoff from O'Hare Airport, Chicago, on August 7, 1968, Trans World Airlines, CV880, experienced a fatigue failure of the 14th-stage compressor disk on its No. 4, G. E. CJ805-3A engine.

Our investigation of this incident disclosed that the failed disk was one of an early design with a history of fatigue-cracking in the web.

The manufacturer has redesigned the disk to reduce steady-state stresses, thereby minimizing the possibility of high cycle fatigue-cracking.

To preclude the recurrence of such an incident, it is recommended that action be initiated for expedited retrofit of affected CJ805-series engines, with the latest compressor disks as outlined in General Electric Service Bulletin (880) 72-253 as revised March 8, 1968.

This subject has been discussed with members of your EA-210 engineering staff by investigators of our Central Investigation Division.

Please do not hesitate to contact us if further information is desired.

Sincerely yours,

Original signed by

Joseph J. O'Connell, Jr. Chairman